Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus for determining a frame format of data, said frame format including a synchronization field which defines said frame format as being of a first or second type, the apparatus comprising:

~~a counter arranged to count a number of consecutive bits of the synchronization field of a frame and,~~

a frame format decoder ~~means for determining~~comprising a counter configured to count a number of consecutive bits of the synchronization field of a frame, wherein the frame format decoder is configured to determine, when N consecutive bits having the same polarity or logic value have been counted by said counter, if said frame format is of said first or second type, depending on the polarity or logic value of said N consecutive bits, where N is an integer greater than 1; and

a training sequence generator configured to output data representative of said frame format type in the form of a training sequence for an equalizer.

2. (previously presented) The apparatus according to claim 1, wherein said first frame format comprises a short frame format with a synchronization field having a first predetermined number of bits, and said second frame format comprises a long frame format with a synchronization field having a second predetermined number of bits, said second predetermined number being greater than said first predetermined number.

3. (previously presented) The apparatus according to claim 2, wherein said short frame format has a synchronization field comprising a first predetermined number of consecutive bits of a first polarity or logic value, and said second frame format has a

synchronization field comprising a second predetermined number of consecutive bits of a second polarity or logic value, opposite to said first polarity or logic value.

4. (currently amended) The apparatus according to claim 3, wherein said synchronization field is scrambled prior to transmission thereof, and the ~~apparatus~~ frame format decoder comprises a descrambler to which said data frame is applied, the output of said descrambler being applied to said counter.

5. (previously presented) The apparatus according to claim 1, wherein said data frame is spread by means of a direct sequence spread spectrum or frequency hopping spread spectrum technique prior to transmission thereof, and said apparatus comprises a despreader to which said data frame is applied prior to the data being passed to said counter.

6. (currently amended) The apparatus according to claim 5, <u>wherein the frame format decoder comprises</u> ~~comprising~~ a demodulator for demodulating the output data from said despreader, prior to the data being provided to said counter.

7. (previously presented) The apparatus according to claim 6, wherein said demodulator comprises a Differential Binary Phase Shift Keying demodulator.

8. (canceled)

9. (currently amended) The apparatus according to claim ~~8~~ <u>1</u>, wherein data representative of said frame format type and said training sequence are output substantially simultaneously.

10. (currently amended) The apparatus according to claim ~~8~~ <u>1</u>, wherein <u>the frame format decoder comprises a descrambler and the training sequence generator comprises a scrambler, a modulator, and a data spreader, wherein</u> data output from ~~a~~ <u>the</u> descrambler

is applied to a the scrambler, a the modulator and a the data spreader prior to being output as said training sequence, wherein said data frame is applied to said descrambler.

11. (canceled)

12. (canceled)

13. (currently amended) A receiver including said decoder apparatus according to claim 12 1.

14. (previously presented) The receiver according to claim 13, including an equalizer.

15. (previously presented) The receiver according to claim 14, wherein said equalizer is an adaptive equalizer.

16. (canceled)

17. (previously presented) The receiver according to claim 13, wherein the receiver is a wireless receiver.

18. (previously presented) A wireless local area network comprising at least one transmitter for transmitting frames of data, and at least one receiver according to claim 13 for receiving said frames of data.

19. (original) A wireless local area network according to claim 18, wherein the transmitter is a wireless transmitter, and the receiver is a wireless receiver.

20. (currently amended) A method of determining a frame format of data received by a receiver, said frame format including a synchronization field which defines said frame format as being a first or second type, the method comprising the steps of:

        receiving a frame at the receiver;

counting a number of consecutive bits of the synchronization field of said frame; ~~and~~

determining, when N consecutive bits having the same polarity or logic value have been counted, if said frame format is of said first or second type, depending on the polarity or logic value of said N consecutive bits, where N is an integer greater than 1<u>;</u> <u>and</u>

<u>outputting data representative of said frame format type in the form of a training sequence for an equalizer.</u>

21. (currently amended) The method according to claim 20, ~~including the step of outputting data representative of said frame format type in the form of a training sequence for an equalizer,~~ <u>wherein</u> data representative of said frame format type and said training sequence ~~being~~ <u>are</u> output substantially simultaneously.

22. (previously presented) The method according to claim 20 wherein the receiver is a wireless receiver.

23. (previously presented) The apparatus according to claim 1, wherein N is equal to 7.